

million. Additional authorizations as necessary for continuing years is provided.

I am sure that the upper Great Lakes region can be a showplace in a more beautiful America. It can also become a rural slum. The choice lies in large measure with us in the Congress. For this reason I urge that a comprehensive regional approach be adopted to solve the problems of this area which I have outlined. I urge that the Senate amend the Appalachian bill and establish an Upper Great Lakes Regional Authority.

Mr. MILLER. Mr. President, will the Senator yield?

Mr. COOPER. I yield.

DOMINO THEORY WITH RESPECT TO SOUTH VIETNAM

Mr. MILLER. Mr. President, the able and knowledgeable columnist, Joseph Alsop, has a most perceptive article on the domino theory with respect to South Vietnam in today's Washington Post.

Those whose euphoria causes them to hope the domino theory will somehow go away would do well to read this article.

I ask unanimous consent that it be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE DOMINO THEORY (By Joseph Alsop)

As was predictable, the Vietnamese crisis has entered another phase of acute inflammation. Political deterioration will inevitably continue until and unless President Johnson takes strong measures to reverse the military trend.

As was also predictable, the Republicans have begun their preparations to exploit an expected disaster in southeast Asia. In a speech obviously intended to make a record for the future, former Vice President Richard M. Nixon has called on President Johnson to take whatever measures may be needed to end the war by winning it.

In short, the specter of a catastrophic American defeat looms larger and larger, and it becomes clearer and clearer that the ink on this defeat—if it is permitted to occur—will poison our national life. In these circumstances, the aimless drift that afflicts our Vietnamese policymaking calls out for explanation. Part of the explanation is clearly to be found in a question sometimes put to callers at the White House.

"Do you still believe in the domino theory?" is the question.

It is asked in a tone so scornful and accusing that little doubt remains about the current unpopularity of the domino theory in White House circles. The President has evidently persuaded himself, or at least three-quarters persuaded himself, that a great defeat in Vietnam need not have the grave consequences outside Vietnam predicted by the domino theorists.

It would be comforting if there were any solid evidence on this side of the argument. Unhappily, however, recent developments have produced a mass of evidence to sustain the domino theory. The following sets of facts are of particular importance.

Item: The situation in northeast Thailand is beginning to show marked resemblances to the situation in South Vietnam when the Communist guerrillas were first ordered to take the offensive. Village chiefs loyal to the Government are being murdered more and more frequently. A rather high Central Government official was also assassinated by

the Communist underground in the considerable town of Nakhon Phanom.

The circulation of Communist tracts and pamphlets, both in the northeast and also in Bangkok itself, has also been greatly stepped up. The pressure is on, in short. The aim is to be ready to exploit a U.S. defeat in Vietnam—after which the Thai Government will be urgently and menacingly requested to change its political alignment.

Item: In the Philippines, the Communist guerrillas, the Hukbalahaps, have resumed aggressive activity after years of quiescence. They have an immune stronghold in Pampanga Province, and now number about 2,000 fighting men.

In parallel, Communist propaganda in Manila is bearing more and more important fruits, in the form of anti-American protest meetings, burnings in effigy of the U.S. Ambassador, and so on. Again, these are preparations to exploit an expected American defeat—after which the Philippine Government will more and more tend to sound like Sukarno's Indonesian Government.

Item: Extremely disturbing signs have appeared in Taiwan. The chief Chinese intelligence operative in Macao, Gen. Ch'eng I-ming—the Taiwanese equivalent of the CIA station chiefs in Bonn, Berlin, Vienna, and Moscow, all rolled into one—has defected to the Chinese Communists. Another fairly important military figure, Gen. Chao Chih-hua, has been arrested for subversive public talk.

At least four outbreaks of local dissidence in Chinese Nationalist Army units have had to be forcibly suppressed. In consequence, Generalissimo Chiang Kai-shek has taken the fairly grave step of giving the key post of Minister of Defense to his son, Gen. Chiang Ching-kuo, who is also the head of the government police.

The aim of Chiang Ching-kuo's appointment, quite obviously, is to have a strong hand on the helm of the armed forces, in the event of further trouble. Yet in Taiwan, every thinking Chinese Nationalist long ago made the outcome in Vietnam the unique touchstone of American strength of will. Hence even the strongest hand is unlikely to be able to contain the trouble that will result from a final American defeat in the Vietnamese war.

All this and other evidence indicate that the Chinese Communists are not merely hoping for an American defeat. They are already preparing to take advantage of it, through their rather considerable agent net. The confident expectation of an American defeat is also the key to the mountebank goings-on of Prince Sihanouk in Cambodia, to the violence of President Sukarno in Indonesia, and even to the recent policy shifts of General de Gaulle.

In the circumstances, dismissal of the domino theory is premature, to put it rather mildly.

THE POPULATION EXPLOSION

Mr. MILLER. Mr. President, in the February 9 issue of Look magazine there is a very timely and well documented article by John D. Rockefeller III, entitled "The Hidden Crisis," which discusses the population explosion problem. I commend the article to all who are interested in the subject; and I believe all people should be. I ask unanimous consent that it be printed in the RECORD.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

THE HIDDEN CRISIS

(By John D. Rockefeller 3d)

All last summer, every 12 seconds, the number changed on the huge "demograph"

at the New York World's Fair as it recorded the latest gain in the population of the United States. When the fair opened in April, it read 191,510,364; when it closed in October, it read 192,974,586; when it reopens this April, it will read approximately 194,100,000.

Advertisements in New York subways urged visitors to the fair to "see the exciting story of the population explosion." I am sure millions marveled at this dramatic display of the constant growth of our Nation—an America that every dozen seconds was "bigger and better" than ever.

We are bigger, yes. But is America the better for increased population? I think not. In fact, while we watch the "exciting story of the population explosion," we may, like characters in Greek tragedy, be witnessing our own decline. For unchecked population growth—in our country as elsewhere—threatens, if not human life itself, then surely life as we want it to be.

The problem of population growth is as important as any facing mankind today—and its solution is as difficult. Until recently, I regarded control of nuclear weapons as man's paramount problem. Yet, there is justifiable hope that these weapons will never again be used. An enormous increase in world population, however, seems inevitable.

Both nuclear weapons and population growth endanger mankind. The threat of one is the sudden danger of an act of violence. The other threatens with the erosive quality of a wasting illness. The tragic difference is that the world worries about arms control, while population control seems to be the problem the world would rather forget.

Population growth has a grim arithmetic. The accelerating pace of growth causes the most concern. It took mankind all of recorded time until the 1840's to achieve a population of 1 billion. It took less than a century to add the second billion, 30 years to add the third. And at today's rate of increase, by 1975 the world population will reach 4 billion.

Figures like these surprise many Americans, although "the population explosion" is part of the vernacular of our time. As James Reston writes, "Probably never in history has so obvious and significant a fact been so widely evaded."

The National Academy of Sciences reported last year: "Not only must the current continued increase in the rate of population growth cease, but this rate must decline again. There can be no doubt concerning this long-term prognosis: Either the birth-rate of the world must come down or the death rate must go back up."

We can be sure that man will not willingly surrender the degree of death control he has already won. The solution of the population problem, therefore, is a lower birthrate. The problem's complexity lies in the necessity of communicating effectively with literally hundreds of millions of people. As Arnold Toynbee has put it, "Myriads of minds will have to be enlightened, and myriads of wills will have to be induced to make myriads of difficult personal choices."

These myriads of personal choices are the root of the population problem. Its solution, and mankind's future, depends upon enough of these choices being the right choices: right for the parents, right for the family, right for society. Unfortunately, more often than not, these individual decisions are decisions by default—vital decisions made in default of adequate knowledge.

Large masses of people, even today, simply do not know that they can determine the number of their children. They do not know that means—safe, effective and acceptable means—exist to limit family size. Most important, they are unaware of the facts upon which decisions on family size should be based, of the physical, social, and economic advantages of planned families.

These facts must somehow be communicated; these myriads of minds must be reached. And despite all our recent strides in behavioral sciences, who knows with certainty how to reach and influence even one complex human being?

NEW HOPE FOR SUCCESS

The task is formidable, but I am convinced that in its achievement lies one of the great humanitarian opportunities of our day. We must not be distracted by difficulty. Major developments in recent years present solid reasons for hope that the world's population growth will be stabilized—and in time to preserve the kind of life we know today.

One development I regard as most encouraging is the widespread and rising recognition of the existence of the population problem by government officials, religious leaders and private citizens. The subject of population control, upon which so many were so long silent, is no longer spoken of in whispers, but is being freely and boldly discussed, argued and examined.

The most significant recent recognition of the question was the attention given to it at the latest session of the Ecumenical Council. That followed the announcement last summer by Pope Paul VI that the Catholic Church was giving "wide and profound" study to the problem of birth control. This "extremely grave" problem, the Pope said, "touches on the mainsprings of human life."

Mohamed Ayub Khan, president of Pakistan, is giving vigorous support to a national population-control program in his crowded country. During a visit to the United States, he said: "All the effort that is being mounted in new countries like mine will be wasted if we can't keep our population within reasonable bounds."

An even more tangible reason for my hope that population can be stabilized is the emergence of an improved technology for contraception.

One example is the development and testing of steroid pills, the long-sought oral contraceptive. Although effective, the pills do not meet other requirements of the ideal contraceptive. They are often too expensive for the people who need them most, and they require considerable motivation and good memory, for they must be taken every day for 20 days of every month.

More capable of wide and effective use is the new intrauterine device, sometimes called the coil or loop, which many doctors and demographers believe may be the best contraceptive yet invented.

Since the 1920's, it has been known that a small device (at first, it was a silver ring) placed within the human uterus would prevent a pregnancy. The discovery is credited to a German doctor, although it is said that Arabs prevented breeding of camels by such a technique centuries ago. During the 1950's, experiments with the intrauterine device were repeated, and its design modified in Israel and Japan.

Successful in continuing tests, the device is capable of mass manufacture in plastic. It requires a medically trained person for its insertion, which will help assure responsible use. Among its advantages are that it costs but a few pennies to make, requires only a single motivation and lasts for months and even years. And it can be removed at any time that the user wishes to bear a child. This tiny piece of plastic may symbolize the beginning of a new era of hope for all who concern themselves with the future well-being of man and the world in which he lives.

Still another reason for my hope is the beginning of significant action in several countries. India, Pakistan and South Korea have adopted national policies of limiting population and have programs under way. Thailand, Tunisia, Turkey and Egypt are considering policies or developing programs. Ceylon, Hong Kong and Malaysia are sub-

sidizing privately organized efforts. The governments of half the people in the underdeveloped world now officially favor family planning. However, every attempt to introduce family planning among a large population encounters a defeating lack of knowledge in two crucial areas. There is no sure way to motivate couples to plan their families; nor is there enough tested knowledge of how to organize, staff, finance and administer an effective program within the limitations of the developing nations. This needed know-how, essential to the solution of the population problem, is the purpose of a growing number of important pilot projects in several countries. If they are successful, they will offer the most solid basis for confidence.

On a visit to Taiwan, I had the opportunity of seeing one of these projects in action in the city of Taichung. Conducted by the provincial health department with the support of the population council, it offers an excellent illustration of the approach and scope of these pioneer knowledge-seeking efforts. Set up in a city of 300,000, the Taichung project is one of the most extensive and elaborate social-science experiments ever conducted. The project's experts seek to learn if fertility control can be accepted on a large scale in a developing area, and at what cost in money, time, and personnel.

A preproject survey developed important findings on attitudes toward family planning. It showed that 90 percent of Taichung's wives (and their husbands, too, according to the wives) wished to limit the size of their families. Most wanted only four children, recognized the economic advantage of a small family, did not object in principle to family planning, and did not believe the number of children should be left to "providence" or "fate." The women were aware of the decline in infant mortality and understood that, unlike their parents, they did not need to bear five to seven children in order to have three or four survive to adulthood. The salient message was that in Taichung, people have more children than they want.

To measure how much effort is necessary to control population growth, the Taichung project staff experimented with various kinds and degrees of communication. The city was divided into about 2,400 neighborhoods, and each received one of four kinds of "treatments." In order of increasing effort, the treatments were designated "Nothing," "Mail," "Everything (wives only)," and "Everything (wives and husbands)." The city as a whole was exposed to only two aspects of the program: a general distribution of posters pointing out the advantages of family planning, and a series of meetings where program workers described the program to community leaders and sought their advice and support. The "Nothing" neighborhoods received only the posters and the meetings. The "Mails" had the addition of a direct-mail campaign to newlyweds and parents of two or more children. The "Everything" neighborhoods had home visits by nurse-midwives, who arranged appointments at local health stations, offered a choice of contraceptives, answered questions, and did whatever was necessary to satisfy a couple's desire for guidance.

WHAT ONE TEST PROVED

The results are still preliminary, but greatly encouraging. The effectiveness of word-of-mouth was shown: More than half the women accepting contraceptives came to the health station without personal contact by a program worker; about a quarter came from outside the city where there was no organized effort. The new intrauterine device was the choice of 78 percent of the women accepting contraceptives, and 80 percent of the devices were still in place after 6 months. Reduced to a single statistic, a before-and-after survey showed that one-

fifth fewer women were pregnant—a substantial success in any short-term effort to check population growth. The Taichung project demonstrated that, at least in a setting where literacy is relatively high and medical clinics are available, a well-organized effort will generate its own momentum and produce significant results at a reasonable cost, given a convenient and effective contraceptive method. Plans are now being made, with government support, to extend throughout Taiwan the procedures devised and tested in Taichung.

Such projects represent a significant beginning. From them is emerging a background of knowledge and experience. And in them we are training a growing number of personnel, testing our technology and formulating a strategy of approach. They are the first steps on a long journey.

We have seen the seriousness of the population problem, and some reasons that allow us to hope that we may eventually succeed in its solution. Now, we must ask ourselves what is the measure of success. We fumble for an answer. We fumble because I believe that we, and others all over the world, fail to recognize the population problem in its full and true dimensions. From the days of Malthus, we have inherited a tendency to think that the successful solution lies in striking a healthy balance between numbers of people and quantities of food. To the difficult question of how much is enough, this allows a simple answer. But too often it is a wrong one, because it equates man with animal and food with fodder. The population problem is not one of two dimensions, but of three. The third dimension touches the very essence of human life—man's desire to live as well as to survive.

We may, in days to come, bring more acres under cultivation and vastly increase the yield of each acre. We may reap unimagined harvests from our oceans. We may at last free all mankind from hunger. But even this, I maintain, is not enough.

Man is more than animal, and the needs of his life are far more than bread alone. There are the precious intangibles that make life worth living, that give life quality. There is knowledge, for one, and the satisfaction earned by well-used leisure. There is the quiet joy of appreciation of nature and art, and the abiding strength that comes from moral and spiritual values.

Human needs such as these go far beyond the bare necessities, the creature comforts, mere material resources. They are the third dimension of which I speak. The opportunity to fulfill these needs for himself and for his children should be every man's birthright. Every man deserves at least the chance to lead a life of satisfaction and purpose, to achieve in life more than mere survival.

THE HIGH COST OF GROWTH

This emphasis on the quality of life is, for us in this favored land, the heart of the matter. Unchecked population growth will ultimately place this third dimension beyond our reach, even in America. Indeed, it can be demonstrated that "it can happen here"—and is happening. By thousands of small, seemingly insignificant inroads, the growth of population is eroding what we have come to know as "the American way of life."

For illustration, examine but a few of the consequences of population growth. Consider our land itself. It stretched before the eyes of our forefathers in vast, unexplored reaches. The wealth of its resources was unimaginable, its westward horizons unlimited. Once we beckoned immigrants to help us settle the land. The Northwest Ordinance and the Homestead Act were milestones of national policy designed to put land into the hands of the people. Today, we hold back the immigrant while we strive for a broader policy of conservation. We seek now not to sell land to the people, but to buy it from them; not to promote its use, but to protect